

CLAIMS

What is claimed is:

1. A system, comprising:

a device to couple to a position determining system to determine relative positions of a service vendor and the device, the device including a device identifier to authorize a transaction without revealing the identity of a user of the device;

an information database to couple to the device to provide the device with information about the service vendor; and

a display coupled to the device to display the relative positions and the information about the service vendor on a map.

2. The system of Claim 1 wherein the device is a personal transaction device.

3. The system of Claim 1, wherein the device is configured to provide the device identifier to a transaction privacy clearing house (TPCH) via a point of sale (POS) terminal when the device is coupled to the POS terminal.

4. The system of Claim 1 wherein the POS terminal is a service vendor terminal.

5. The system of Claim 4 wherein the service vendor is selected from the group consisting of a gas station, a hotel, an airline, a merchant, and a restaurant.

6. The system of Claim 1 wherein the position determining system is a Global Positioning System (GPS).

7. The system of Claim 1 wherein the display has a first part to display the map and a second part to display service vendor data and other data.

8. The system of Claim 7 wherein a portion of the service vendor data and a portion of the other data is displayed in real-time on the map.

9. The system of Claim 8 wherein the service vendor data comprises pricing information, location information, coupon information, and driving instructions.

10. The system of Claim 8 wherein the other data comprises a numerical representation of a relative distance between the service vendor and the device.

11. The system of Claim 10 wherein the numerical representation comprises a first number representing an estimated distance in miles or kilometers separating the device from a service vendor location, and further comprises a second number representing an estimated travel time required to traverse the estimated distance.

12. The system of Claim 1 wherein the position determining system is a vehicle's onboard navigation system.

13. The system of Claim 1 wherein the device is selected from the group consisting of a privacy card, a digital wallet, and a privacy card configured to be coupled to a digital wallet.

14. The system of Claim 1 wherein the device further comprises a biometric security device.

15. The system of Claim 14 wherein the biometric security device comprises a fingerprint scanner.

16. The system of Claim 1 wherein the device further comprises a magnetic stripe mechanism to read and encode a magnetic stripe of one of a credit card, a smart card, or a privacy card.

17. An electronic user device for locating service vendors and performing transactions, the device comprising:

a communication logic to communicate with a position determining system to determine relative positions between the device and a vendor, and further to transmit a device identifier to authorize a transaction without revealing an identity of a user of the device; and

a mapping logic coupled to the communication logic to display relative positions of the device and a service vendor on a map.

18. The device of Claim 17, further comprising:

a security logic to authenticate the user and further coupled to the communication logic to establish a secure communication channel.

19. The device of Claim 17, further comprising:

a display coupled to the mapping logic for displaying the map.

20. The device of Claim 19, wherein a correlation between the identity of the user and the device identifier is maintained separate from the personal transaction device and is used to authorize a transaction.

21. The device of Claim 20, wherein the correlation is stored in a transaction privacy clearing house (TPCH).

22. The device of Claim 17, wherein the communication logic is further configured to communicate with an information database to retrieve data for the service vendor, and wherein the mapping logic is further calculated to display the data for the service vendor on the map.

23. The device of Claim 17, further comprising:

calculation logic coupled with the communication logic and configured to calculate an estimated relative distance and a corresponding estimated travel time between the device and the service vendor.

24. The device of claim 17 wherein the communication logic is selected from the group consisting of a smart card chip interface, a magnetic stripe, and a wireless connection.

25. A method to enable a user to locate a service vendor, the method comprising:

coupling a user device to a position determining system, the device including a device identifier to authorize a transaction without revealing the identity of the user; and

displaying a location for a service vendor obtained from the position determining system relative to a position for the device.

26. The method of Claim 25, further comprising:

retrieving a map from an information database; and

displaying the map on a display screen coupled to the device.

27. The method of Claim 26, further comprising:

displaying other information on the display screen.

28. The method of Claim 27 wherein displaying the other information further comprises:

calculating a relative distance and a corresponding estimated travel time between the device and a service vendor; and

displaying the relative distance and corresponding estimated travel time for a user.

29. The method of Claim 27 wherein the other information is selected from the group consisting of service vendor logos, service vendor prices, service vendor specific hyperlinks, and service vendor coupon hyperlinks.

30. The method of Claim 25, further comprising:

conducting an electronic commerce transaction with a service vendor using the device without requiring a user of the device to reveal personal identification information to the service vendor.

31. The method of Claim 25 wherein the position determining system is a Global Positioning System.

32. The method of Claim 25 wherein the position determining system is a vehicle's onboard navigation system.

33. The method of Claim 25, further comprising:
contacting a financial processing system to transfer funds in an amount associated with a transaction from an account for the user to an account of a service vendor.

33. The method of Claim 25, further comprising:
activating a transponder associated with the device to conduct an electronic commerce transaction with a point-of-sale terminal.

35. The method of Claim 25 further comprising:
using the device to locate a closest service vendor.

36. The method of Claim 25 further comprising:
using the device to locate a lowest price commodity.

37. The method of Claim 36 wherein the commodity is gasoline.

38. The method of Claim 25 further comprising:

using the device to locate a closest service vendor having a lowest priced commodity.

39. The method of Claim 25, further comprising:

using the device to locate a service vendor that accepts electronic commerce payments.